## PCT/EP98/04406 Ursapharm Arzneimittel GmbH

Amended claims as attached to the IPER

5

## Patent Claims

- 1. Use of bromelaine proteases for inhibiting blood coagulation, wherein the bromelaine proteases are selected from the group consisting of:
  - a) a basic bromelaine protease, having
  - a molecular weight of about 24.4 KDa,
  - an optimal activity at a pH in the range of 4 to 5.5, and
  - comprising the following amino acid sequence:

Val Pro Glin Ser I e Asp Trp Arg Asp Tyr Gly Ala Val Thr Ser Val Lys Asn Glin Asn

and/or

- b) a basic bromelaine protease, having
- a molecular weight of about 24 5 KDa,
- an optimal activity at a pH in the range of 3.5 to 5, and
- comprising the following amino acid sequence:

25

30

Val Pro Gln Ser IIe Asp Trp Arg Asp Tyr Gly Ala Val Thr Ser Val Lys Asn Gln Asn

and/or

- c) a basic bromelaine protease, having
  - a molecular weight of about 23 4 KDa,
  - an optimal activity at a pH in the range of 6 to 8, and
  - comprising the following amino acid sequence:

Val Pro Gln Ser Ile Asp Trp Arg Asp Ser Gly Ala Val Thr Ser Val Lys Asn Gln Gly.

6'. i -

- 2. Use according to claim 1, wherein the plasmin production is stimulated.
- 3. Use according to claim 1, wherein the production of fibrin is inhibited.
- 4. Use according to claim 1, wherein the adhesion of thrombocytes on endothelium cells is inhibited.
- 5. Medicament for inhibiting blood coagulation, wherein the medicament, apart from conventional excipients and auxiliary substances, consists of one or more bromelaine proteases according to claim 1.
- 6. Medicament according to claim 5, wherein the bromelaine protease is a recombinant bromelaine protease.

ad 67

5